



Attachment 4 consists of the following items:

- ✓ **Total Cost Estimate.** This attachment presents the overall cost of project implementation.
- ✓ **Detailed Work Item Budgets.** This attachment provides a budget estimate for each budget category row of this proposal.

The proposal budget provides detailed budget documentation to support each cost shown in the tables below under the section entitled Detailed Work Item Budgets. Please note that for many of the budget categories shown in the tables, there may be several tasks and sub-tasks. Tables 4-2 through 4-7 also present the proposed funding match for each task within the project, including information that describes how the City of San Marcos will meet their funding match of at least 50% of the total project costs.

## Total Cost Estimate

Table 4-1 presents the overall cost of proposal implementation. Detailed cost estimates for each task contained in the proposal follow. The specific work items outlined in Attachment 3 are reflected in the detailed cost estimates.

The required 50% funding match will be met by the City of San Marcos using tax increment financing. Approved by the City Council on April 12, 2011 concurrent with Resolution 2011-7468 (refer to Attachment 1), the City has agreed to fund the local match from the City's tax increment financing fund secured through the San Marcos Redevelopment Agency (RDA). Since its inception in 1983, the RDA has invested more than \$300 million in a wide variety of sorely needed public improvements intended to alleviate blight and improve the city's economic base.

**Table 4-1: Summary Budget (\$2009)**

Table 6 – Project Budget						
Budget Category		Non-State Share (Funding Match)	Requested Grant Funding	Other State Funds Being Used	Total	% Funding Match
(a)	Direct Project Administration Costs	\$0	\$0	\$0	\$0	N/A
(b)	Land Purchase/Easement	\$0	\$0	\$0	\$0	N/A
(c)	Planning/ Design/ Engineering/ Environmental Documentation	\$978,533	\$978,533	\$0	\$1,957,105	50%
(d)	Construction	\$2,104,581	\$2,104,581	\$0	\$4,209,162	50%
(e)	Environmental Compliance/ Mitigation/ Enhancement	\$2,491,025	\$2,491,025	\$0	\$4,982,050	50%
(f)	Construction Administration	\$147,321	\$147,321	\$0	\$294,641	50%
(g)	Other Costs	\$0	\$0	\$0	\$0	N/A
(h)	Construction Contingency	\$357,650	\$357,650	\$0	\$715,300	50%
(i)	<b>Grand Total</b>	<b>\$6,079,129</b>	<b>\$6,079,129</b>	<b>\$0</b>	<b>\$12,158,258</b>	<b>50%</b>
(j)	<b>Calculation of Funding Match %</b>	<b>50%</b>	<b>50%</b>	<b>--</b>	<b>100%</b>	
Sources of Funds for Non-State Share (Funding Match): The non-state share funding match will be provided by the San Marcos Redevelopment Agency tax increment financing fund and potentially federal funding sources.						

## Detailed Work Item Budgets

Detailed budgets for each of the tasks included within this proposal, including a summary budget and supporting cost information are provided in the following sections. This Stormwater Flood Management Proposal is requesting funding for seven project tasks identified within the *San Marcos Creek Floodway Improvement Project Work Plan* (refer to Attachment 3).

**Table 4-2: Cost Breakdown by Work Plan Task and Subtask**

Row/Task	Category	Total
Row (a)	Direct Project Administration Costs	\$0
Task 1	<i>Project Administration</i>	\$0
Task 2	<i>Labor Compliance Program</i>	\$0
Task 3	<i>Reporting</i>	\$0
Row (b)	Land Purchase Easement	\$0
Row (c)	Planning/Design/Engineering/Environmental Documentation	\$1,957,105
Task 4	<i>Assessment and Evaluation</i>	\$50,000
Task 5	<i>Final Design</i>	\$1,647,105
Task 6	<i>Environmental Documentation</i>	\$200,000
Task 7	<i>Permitting</i>	\$60,000
Row (d)	Construction	\$4,209,162
Task 8	<i>Construction Contracting</i>	\$0
Task 9	<i>Construction</i>	\$4,209,162
Row (e)	Environmental Compliance/Mitigation/Enhancement	\$4,982,050
Task 10	<i>Environmental Compliance/Mitigation/Enhancement</i>	\$4,982,050
Row (f)	Construction Administration	\$294,641
Task 11	<i>Construction Administration</i>	\$294,641
Row (g)	Other Costs	\$0
Row (h)	Construction Contingency	\$715,300
Row (i)	Grand Total	\$12,158,258

The sections below provide detailed descriptions of each of the row and task budgets (where applicable) shown in the summary table above. In addition, each description below describes how cost estimates for each of the tasks or rows were calculated.

### Row (a) Direct Project Administration Costs

#### **Task 1 – Project Administration**

General project administration will require the collaboration of several departments within the City and is not included within the Work Plan (Attachment 3) or Budget.

#### **Task 2 – Labor Compliance Program**

The costs associated with the City's Labor Compliance Program were previously budgeted as a direct operating cost for the City. Therefore, the expected labor compliance tasks associated with the project are not included within the Work Plan (Attachment 3) or Budget.

#### **Task 3 – Reporting**

Project reporting and invoicing will require the collaboration of several departments within the City and is not included within the Work Plan (Attachment 3) or Budget.

### Row (b) Land Purchase / Easement

Not applicable.

### **Row (c) Planning / Design / Engineering / Environmental Documentation**

The total planning / design / engineering / environmental documentation costs for the project are \$1,957,105. Table 4-3 provides a detailed listing of all applicable costs. The cost total is based on the following:

#### **Task 4 – Assessment and Evaluation**

This task includes costs to prepare the Floodwall Hydraulic Analysis Technical Memorandum to finalize selection of the floodwall materials. This cost was determined based on an assumption that 353 hours of work would be completed at a billing rate of \$141.67. These estimates are based on an average of standard industry published rates.

#### **Task 5 – Final Design**

##### ***Phase I Design***

Preliminary design and engineering for Phase 1 of the *San Marcos Creek Floodway Improvement Project* has been completed up to 30 percent for proposed improvements to the channel and surrounding area. Preliminary design was completed in March 2011.

Pending concurrence from resource agencies, the proposed design should proceed to 60 percent design by September 2011. The 90% design phase should be completed by November 2011, and 100% design will be completed after environmental permitting (see Task 7) in July 2012. The total costs associated with Phase I design efforts are anticipated to be \$700,000. The City of San Marcos will provide \$350,000 of this amount, and is requesting the remaining amount as grant funds. Costs for the Phase 1 design efforts are based on previous experience as well as an average of standard industry published rates.

##### ***Phases 2, 3, and 4 Design***

Phases 2, 3, and 4 of the *San Marcos Creek Floodway Improvement Project* have not yet begun. These engineering design efforts are anticipated to include the following components:

- Phase 2 will include engineering design for construction of the floodwall.
- Phase 3 will include engineering design for grading of the channel.
- Phase 4 will include engineering design for mitigation efforts.

The costs associated with each of these design efforts is demonstrated within Table 4-3 below. The hourly and cost projections are based on the historical and industry standard calculation of 10% of the cost of construction for each individual phase of work. In total, these efforts are anticipated to cost \$947,105. Of this amount, one half (\$473,553) will be provided by the City of San Marcos, and one half is being requested as part of this Stormwater Flood Management Grant Proposal.

#### **Task 6 – Environmental Documentation**

The City of San Marcos is updating a previous Environmental Impact Report, and is expecting to complete this effort in January 2012. The costs associated with this effort are \$200,000, half of which will be provided by the City of San Marcos, and the other half is being requested as grant funds. This cost of updating the Environmental Impact Report was determined based on an average of standard industry published rates. The cost break-down for this task is demonstrated within Table 4-3 below.

#### **Task 7 – Permitting**

The City of San Marcos is anticipating requirements for three permitting efforts associated with this project. The total anticipated costs associated with these permits are \$60,000. Half of this amount will be provided by the City of San Marcos, and the other half is being requested as grant funds. The cost for permitting was determined based on an average of standard industry published rates. The cost break-down for this task is demonstrated below in Table 4-3.

**Table 4-3: Row (c) Planning / Design / Engineering / Environmental Documentation Budget**

Discipline	Hourly Wage (\$/hr)	Number of Hours	Total	Funding Match	Grant Request
<b>Assessment and Evaluation</b>					
Floodwall Hydraulic Analysis Technical Memorandum	\$141.67	353	\$50,000	\$25,000	\$25,000
<b>Final Design</b>					
Phase I Final Design	\$141.67	4,941	\$700,000	\$350,000	\$350,000
Phase 2 Floodwall Construction Engineering	\$141.67	2,576	\$365,000	\$182,500	\$182,500
Phase 3 Channel Grading Engineering	\$141.67	592	\$83,900	\$41,950	\$41,950
Phase 4 Mitigation Engineering	\$141.67	3,517	\$498,205	\$249,102	\$249,103
<b>Environmental Documentation</b>					
Updated Environmental Impact Report	\$125.00	1,600	\$200,000	\$100,000	\$100,000
<b>Permitting</b>					
Regulatory Permits	\$125.00	1,600	\$60,000	\$30,000	\$30,000
<b>Total</b>			<b>\$1,957,105</b>	<b>\$978,553</b>	<b>\$978,553</b>

#### Row (d) Construction / Implementation

The Construction / Implementation costs for the project are estimated to be \$4,209,162. Table 4-4 provides a detailed listing of all applicable costs. This cost total is based on the following:

#### Task 8 – Construction Contracting

Construction contracting will require the collaboration of several departments within the City and is not included within the Work Plan (Attachment 3) and Budget.

#### Task 9 – Construction / Implementation

Construction costs for this project are divided between multiple categories outlined within Table 4-4 below. These costs are necessary to complete Phase 2 and Phase 3 of the *San Marcos Creek Floodway Improvement Project* (refer to Attachment 3 for more information).

The total cost associated with this effort is \$ 4,209,162, of which \$2,104,581 will be provided as matching funds and \$2,104,581 is being requested as grant funds. These costs were determined based on the unit costs and number of units anticipated for the project based on construction estimates from the City of San Marcos for similar projects.

**Table 4-4: Row (d) Construction / Implementation Costs**

Discipline	Unit Costs (\$)	Number of Units	Total (\$)	Funding Match	Grant Request
<b>Phase 2 – Floodwall</b>					
Clearing and Grubbing	\$20,000	1	\$20,000	\$10,000	\$10,000
Mobilization	\$50,000	1	\$50,000	\$25,000	\$25,000
Surveying and Construction Staking	\$20,000	1	\$20,000	\$10,000	\$10,000
Dirt Fill	\$10	25,000	\$250,000	\$125,000	\$125,000
Sheetpile Floodwall	\$60.00	32,500	\$1,950,000	\$975,000	\$975,000
60" Reinforced Concrete Pipes	\$400	1,600	\$640,000	\$320,000	\$320,000
24" Reinforced Concrete Pipes	\$116	500	\$58,000	\$29,000	\$29,000
Cleanouts	\$4,200	10	\$42,000	\$21,000	\$21,000
Storm Drain Inlet	\$5,000	10	\$50,000	\$25,000	\$25,000
Stormwater Pollution Prevention Plans	\$100,000	1	\$100,000	\$50,000	\$50,000
Offsite Drainage/Access Improvements	\$100,000	1	\$100,000	\$50,000	\$50,000
Traffic Control	\$50,000	1	\$50,000	\$25,000	\$25,000
Dry Utilities	\$10,000	1	\$10,000	\$5,000	\$5,000
Unclassified Excavation	\$5.00	30,000	\$150,000	\$75,000	\$75,000
Retaining walls	\$50	1,000	\$50,000	\$25,000	\$25,000
Landscaping/Erosion Control	\$50	2,000	\$100,000	\$50,000	\$50,000
As-built plans	\$10,000	1	\$10,000	\$5,000	\$5,000
<b>Phase 3 – Channel Grading</b>					
Mobilization and Demolition	\$27,000	1	\$27,000	\$13,500	\$13,500
Clearing and Grubbing	\$9,825	4	\$39,300	\$19,650	\$19,650
Stripping	\$3,500	4	\$14,000	\$7,000	\$7,000
Excavation	\$12	30,826	\$369,912	\$184,956	\$184,956
Rock Excavation	\$25	3,918	\$97,950	\$48,975	\$48,975
Erosion Control	\$11,000	1	\$11,000	\$5,500	\$5,500
<b>Total</b>			<b>\$4,209,162</b>	<b>\$2,104,581</b>	<b>\$2,104,581</b>

#### **Row (e) Environmental Compliance / Mitigation / Enhancement**

The Environmental Compliance/Mitigation/Enhancement costs for the project are \$7,977,050. Table 4-5 provides a detailed listing of all applicable costs. This cost total is based on the following:

#### **Task 10 – Environmental Compliance / Mitigation / Enhancement**

Environmental compliance/mitigation/enhancement costs for this project are divided between multiple categories outlined within Table 4-5 below. These costs are necessary to complete Phase 4 work, which include restoration, mitigation, and enhancement efforts, as well as other deliverables described within Task 10 of the Work Plan (refer to Attachment 3).

The total cost associated with this effort is \$4,982,050, of which \$2,491,025 will be provided as matching funds and \$2,491,025 is being requested as grant funds. These costs were determined based on the unit costs and number of units anticipated for the project based on estimates from the City of San Marcos for similar projects (refer to Table 4-5).

**Table 4-5: Row (e) Environmental Compliance / Mitigation / Enhancement Costs**

Discipline	Unit Costs (\$)	Number of Units	Total (\$)	Funding Match	Grant Request
<b>Phase 4 – Restoration / Mitigation</b>					
Prepare Mitigation Plans and Specifications	\$60,000.00	1	\$60,000	\$30,000	\$30,000
Biological Monitoring of Mitigation Installation Work	\$30,000	1	\$30,000	\$15,000	\$15,000
Site Preparation, Weed Eradication, and Exotics Removal	\$10,000	31	\$310,000	\$155,000	\$155,000
Install Temporary Above-Grade Irrigation System	\$30,500	67	\$2,052,650	\$1,026,325	\$1,026,325
Set Water Meters and Establish P.O.C. with Backflow	\$65,000	4	\$260,000	\$130,000	\$130,000
Container Plant Wetland Creation and Restoration Areas	\$8,500	28	\$238,000	\$119,000	\$119,000
Container Plant Wetland Enhancement and Slope Areas	\$5,500	39	\$216,150	\$108,075	\$108,075
Hydroseed all Mitigation Areas and Slopes	\$7,500	67	\$504,750	\$252,375	\$252,375
Bonding per Army Corps of Engineers Requirements	\$105,000	5	\$525,000	\$262,500	\$262,500
Draft, Process, and Record Conservation Easement	\$15,000	1	\$15,000	\$7,500	\$7,500
Irrigation Water	\$225,000	3	\$675,000	\$337,500	\$337,500
Repairs and Remedial Work During 5-year Mitigation and Monitoring Period	\$75,000	1	\$75,000	\$37,500	\$37,500
Prepare Habitat Management Plan	\$12,500	1	\$12,500	\$6,250	\$6,250
Prepare Property Assessment Record	\$8,000	1	\$8,000	\$4,000	\$4,000
<b>Total</b>			<b>\$4,982,050</b>	<b>\$2,491,025</b>	<b>\$2,491,025</b>

#### **Row (f) Construction Administration**

The Construction Administration costs for the project are estimated to be \$294,641. This cost total is based on the following:

#### **Task 11 – Construction Administration**

Construction administration will require the collaboration of several departments within the City and consultant services. However, City staff time is not included in the construction administration costs. This lump sum of \$294,641 expected for this task is based on a percentage of the total construction costs. In this case, the amount allocated is 7% of the total construction cost of \$4,982,050.

#### **Row (g) Other Costs**

Not applicable.

#### **Row (h) Construction Contingency**

The Construction Contingency for the *San Marcos Creek Floodway Improvement Project* is estimated to be \$715,300. This was estimated to be approximately 17% of the total construction cost of \$4,209,162. Half of this amount (\$357,650) is being requested as grant funding, and the other half will be provided as matching funds.

**Row (i) Grand Total**

The grand total for the proposed *San Marcos Creek Floodway Improvement Project* Work Plan (see Attachment 3) is \$12,158,258.

**Table 4-6: Row (i) Grand Total Costs**

<b>Row</b>	<b>Budget Category</b>	<b>Total Costs</b>
(a)	Direct Project Administration Costs	\$0
(b)	Land Purchase/Easement	\$0
(c)	Planning/Design/Engineering/ Environmental Documentation	\$1,957,105
(d)	Construction/Implementation	\$4,209,162
(e)	Environmental Compliance/ Mitigation/Enhancement	\$4,982,050
(f)	Construction Administration	\$294,641
(g)	Other Costs (Including Legal Costs, Permitting and Licenses)	\$0
(h)	Construction/Implementation Contingency	\$715,300
<b>(i)</b>	<b>Grand Total</b>	<b>\$12,158,258</b>

